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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,545	11/15/2001	Bruno Deltour	216112US2	7361

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EXAMINER

DEAN, RAYMOND S

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 08/12/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/987,545	Applicant(s) DELTOUR ET AL.	
	Examiner Raymond S Dean	Art Unit 2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/15/01
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 - 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|----------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 – 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kroon et al. (WO 00/18041) in view of McGibney (US 6,594,273).

Regarding Claim 1, Kroon teaches a method to increase the information bit rate in a telecommunication network comprising several stations for the transmission of data and speech (Figure 2, Page 5 lines 14 – 15, Page 9 lines 1 – 3, Page 9 lines 6 - 8), wherein the method consists of the time-multiplexing of the data and speech sub-channels to form a frame consisting of an alternation of data and speech slots (Figure 2, Figure 6, Page 9 lines 1 – 3, Page 9 lines 6 – 8, Page 13 line 6, this is a TDMA system which means that there will be frames comprising time slots wherein some of said time slots will be voice time slots and some of said time slots will be data time slots).

Kroon does not specifically teach time multiplexing of the data and speech sub-channels with a general services and synchronization sub-channel to form a frame consisting of an alternation of data, speech and synchronization slots.

McGibney teaches time multiplexing of the data sub-channels with a general services and synchronization sub-channel to form a frame consisting of data and synchronization slots (Column 4 lines 25 – 32).

Kroon and McGibney both teach a wireless TDMA network thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the synchronization sub-channel taught in McGibney in the wireless network of Kroon for the purpose of setting the pace of the TDMA frame for the entire network as taught by McGibney thus enabling all of the terminals in said network to be synchronized for communicating with one another.

Regarding Claim 2, Kroon in view of McGibney teaches all of the claimed limitations recited in Claim 1. McGibney further teaches wherein the synchronization sub-channel is used for tasks pertaining to the links between at least two stations of the network (Column 4 lines 50 – 58, the terminal in the network are synchronized so that said terminals can perform tasks such as communicating with one another).

Regarding Claim 3, Kroon in view of McGibney teaches all of the claimed limitations recited in Claim 2. Kroon further teaches wherein the tasks comprise at least one of the following tasks: a request for priority transmission formulated by a unit, a warning reported by a unit, a “flash” message, a request for the repetition of a message, commands sent out by the master unit, the reconfiguration of the network (Page 16 lines 8 – 13).

Regarding Claim 4, Kroon in view of McGibney teaches all of the claimed limitations recited in all of the above claims. McGibney further teaches a first part

reserved for the synchronization with the synchronization signal sent by one of the stations of the network (Column 4 lines 50 – 53).

Regarding Claim 5, Kroon in view of McGibney teaches all of the claimed limitations recited in all of the above claims. McGibney further teaches wherein a synchronization signal is sent by the master station of the network on the synchronization sub-channel (Column 1 lines 48 – 51, Column 4 lines 55 – 58, the active terminal is the master terminal).

Regarding Claim 6, Kroon in view of McGibney teaches all of the claimed limitations recited in all of the above claims. Kroon further teaches wherein when one of the sub-channels, namely the data or the speech sub-channel, is not busy, it is used for the transmission of the information flowing in the other sub-channel (Page 5 lines 12 – 13, Page 16 lines 2 – 5, the control channel can also be a data channel that can transmit the same data that is transmitted on another data channel).

Regarding Claim 7, Kroon in view of McGibney teaches all of the claimed limitations recited in all of the above claims. Kroon further teaches implementing an anti-collision procedure when there are several simultaneous or almost simultaneous requests for the use of a data or speech sub-channel (Page 9 lines 19 – 29, Page 10 lines 1 – 9).

Regarding Claim 8, Kroon in view of McGibney teaches all of the claimed limitations recited in Claim 7. Kroon further teaches wherein the anti-collision process consists in assigning a random number to each requesting unit, the unit with the lowest number obtaining the right to send first, and the other units obtaining the right to send in

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the order corresponding to the rising order of random numbers that have been assigned to them (Page 10 lines 20 – 26, Page 16 lines 8 – 13, the priority status of the terminals are based on their randomly chosen mini/sub slots).

Regarding Claim 9, Kroon in view of McGibney teaches all of the claimed limitations recited in Claim 7. Kroon further teaches wherein the anti-collision process is governed by a rotating rule of priority (Page 16 lines 8 – 13).

Regarding Claim 10, Kroon in view of McGibney teaches all of the claimed limitations recited in Claims 6 to 9. Kroon further teaches wherein when a first station makes simultaneous use of both the data sub-channel and the speech sub-channel, and when another station requires the use of one of the sub-channels, the first station releases the required sub-channel (Page 9 lines 1 – 3, Page 9 lines 6 – 8, Page 13 lines 6 – 13, Page 15 lines 24 – 28, this is a TDMA system which means that there will be frames comprising time slots wherein some of said time slots will be voice time slots and some of said time slots will be data time slots thus both of the voice and data sub-channels can be used simultaneously).

Conclusion

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Raymond S Dean whose telephone number is 703-305-8998. The examiner can normally be reached on 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay A Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Raymond S. Dean
August 2, 2004

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